

## PROPOSAL EVALUATION

### *Proposition 84 Integrated Regional Water Management (IRWM) Grant Program*

#### *Implementation Grant, Round 1, FY 2010-2011*

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<b>Applicant</b>	San Diego County Water Authority	<b>Amount Requested</b>	\$7,900,000
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<b>Proposal Title</b>	San Diego IRWM Implementation Grant Proposal	<b>Total Proposal Cost</b>	\$16,946,327
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#### PROPOSAL SUMMARY

The proposal consists of 11 projects: (1) Sustainable Landscapes Program, (2) North San Diego County Regional Recycled Water Project, (3) North San Diego County Cooperative Demineralization Project, (4) Rural Disadvantaged Community Partnership Project, (5) Lake Hodges Water Quality and Quagga Mitigation Measures, (6) Implementing Nutrient Management in the Santa Margarita River Watershed, (7) Bannock Avenue Neighborhood Streetscape Enhancements for Tecolote Creek Watershed Protection, (8) Pilot Concrete Channel Infiltration Project, (9) San Diego Regional Water Quality Assessment and Outreach Project, (10) Chollas Creek Integration Project, and (11) Regional Water Data Management Program.

#### PROPOSAL SCORE

Criteria	Score/ Points Possible	Criteria	Score/ Points Possible
Work Plan	9/15	Economic Analysis – Water Supply Costs and Benefits	12/15
Budget	4/5	Water Quality and Other Expected Benefits	6/15
Schedule	3/5	Economic Analysis – Flood Damage Reduction	3/15
Monitoring, Assessment, and Performance	3/5	Program Preferences	8/10
Total Score (max. possible = 85)			48

#### EVALUATION SUMMARY

The following is a review summary of the proposal.

##### Work Plan

The work plan criteria are less than fully addressed, and some of the projects lack detailed documentation to ensure the outcome of the work plan. Project 1 (tasks 9.3 - 9.6) lacks details such as a characterization of their target audience, how many or what incentives will be given out, or how they will determine and prioritize the recipients. Projects 2, 5, and 10 refer to supporting documentation, but do not provide the documents as attachments. A component of Project 4 is to identify and build at least two critical water supply or water quality projects for a Disadvantaged Community (DAC), however, without the projects not selected yet, it is difficult to ensure the outcomes. For Project 5 it will not be known what specific requirements of environmental documentation or permitting are required until the design work is under

way. Project 6 is an interregional project; the proposal does not address how this project, which relies on the award of two separate IRWM grants, would be completed if only one region receives funding.

### **Budget**

All project budgets are provided with cost information as described in the PSP, the costs are considered reasonable, and the work items agree with the work plan and schedule. However, supporting documentation for some of the budget categories are not fully supported or lacks detail. The summary budget provided is not shown on a per project level as described in the PSP's Table 8. Instead, a budget that summed each budget category for all projects (similar to Table 7 of the PSP) is provided. Inaccuracies and accounting mistakes exist in the budgets for Projects 1, 9, and 11, though the totals are unaffected by these accounting errors. Projects 1, 3, 4, 6, 7, 8, 10, and 11 include discussion of tasks that are being paid for by other funding sources and are therefore left out of the budget all together (typically labor compliance costs and project administration). The Project 6 budget does not adequately discuss how they arrived at the regional funding split, as the footnoted amounts on the Project 6 summary budget is not consistent with narrative discussion on the same page. Table 4-35 does not provide any basis for the \$40,895 lump sum line item stating "Laboratory analysis, supplies and travel."

### **Schedule**

The schedules are not entirely consistent with the work plan, but are generally reasonable, and at least 1 of the projects demonstrated a readiness to begin construction by December 1, 2011. Inconsistencies between what is stated in the work plan and what is presented in the schedules are noted in projects 1, 4, 5, 6, 9, 10, and 11. Some examples: Project 6 identifies the field activities (Task 4B) for 1 year in the work plan, but showed 2.4 years in the schedule. Project 10's work plan shows Task 4 won't be completed until 2012, but the schedule shows completion in 2010. Project 11's work plan provided completion dates for tasks 4.1, 4.2, 4.3, and 4.4 but the schedule provided completely different completion dates for the same tasks. Project 4 does not appear to have enough time (5.4 months) to plan and design two water quality/water supply projects.

### **Monitoring, Assessment, and Performance Measures**

The Monitoring, Assessment, and Performance Measure plan criteria is less than fully addressed and not well supported by thorough documentation or logical rationale. Several projects (3, 4, 5, 6, 7, 8, 10, and 11) lack quantifiable targets for some or all of the performance measures. Source water diversification does not appear to be a benefit of Project 5, as this is an existing water source, nor is the benefit of pollutant reduction effectively measured by completing tasks in a schedule to develop a plan. The measurement tool (#of stakeholder meetings) for the outcome indicator of Project 6 stakeholder involvement benefit does not appear to effectively measure the project outcome, as the number of meetings held does not assure an increase in general knowledge. The objectives listed in the Performance Measure table for Project 10 do not seem to match the purpose and objectives outlined in the work plan. For instance, a group survey of trail sites is included in the outcome indicators, but it is not identified in the work plan. The same is true for reducing landscape irrigation demand. Creek restoration outcome indicators are left undefined.

### **Economic Analysis – Water Supply Costs and Benefits**

High levels of water supply benefits relative to costs can be realized through this proposal, based on the quality of the analysis and supporting documentation. Some benefits in this proposal are contingent on Upper Santa Margarita's proposal also being funded. However, even if the other proposal is not funded it appears that benefits remain high.

Six of these projects claim monetized water supply benefits. Monetized water supply benefits are \$199.933 million (M). Almost all of these benefits are associated with four projects: Project 2 (\$61.324 M), Project 3 (\$55.645 M), Project 5 (\$41.783 M), and Project 6 (\$40.867 M). Monetized supply benefits of Project 1 and 4 are each less than \$200,000.

Project 6 is the same project as Project 5 in the Upper Santa Margarita Watershed Planning Region IRWM application. Both applicants indicate in their budgets that they are expecting funds from the other; that is, each is planning for the other to be awarded. (Santa Margarita p. 4-26, Table 4-33, column c, SDCWA, Section 4 p. 26 of 31, Table Z, column c.) Even if this project was completely funded, it is a study only.

Project 6 claims a water supply benefit of avoided water imports as the study may result in the allowance of recycled water to be used to supplement Santa Margarita River flows instead of imported raw water. The annual cost of recycled water needed to realize project benefits is \$225 per AF plus \$300 per AF for desalination. The source of the reclaimed water that would provide the 4,000 AFY is not discussed. If new recycled water is used, the NPV of costs for water would probably be close to \$33 M ( $4,000 * \$525 * 15.6$  NPV factor). If desalination only is needed, the NPV of incremental water costs may be about \$19 M ( $4,000 * \$300 * 15.6$ ). However, the opportunity cost of the recycled water may then need to be included. The costs of implementing results of the study are not included. Benefits should be limited to the share of total project costs provided by the proposal, which is no more than seven percent of \$40.867 M. About \$3 M NPV of expected benefit can be assigned to this study. Regarding water prices, on page 7-40, the numbers discussed in the text do not match Table 7-1-2. It's not clear that real rate increases will occur after 2020. Real rate increases from 3 to 4 percent from 2012 to 2020 are larger than other proposals. Claimed water supply benefits are based on volumetric charges, plus "fixed charges (in volumetric terms)" (p. 7-3). These additional charges are not appropriate for benefits purposes.

The proposal notes that several of the projects will not be completed within the budgets provided by the applicant. If no benefits for projects that are not fully funded are allowed, then adjusted benefits are about \$30 M (primarily Project 5) as compared to the proposal budget of \$16.95 M. If benefits for projects that are not fully funded are allowed, and their additional costs are included, then water supply benefits are \$116 M compared to costs of \$57 M. In either case, benefits appear to be far in excess of costs. Applicant should consider providing both portions of a project in a single application and then the project benefits are not dependant on both applications being funded.

### **Water Quality and Other Expected Benefits**

Average levels of water quality benefits relative to costs can be realized through this proposal, as demonstrated by the analysis and supporting documentation. Five of these projects claim monetized water quality and other benefits of \$18.093 M. Most benefits are claimed for Project 5 (\$12.114 M). Project 5 benefits are primarily avoided power production losses. Avoided costs of repairs from Quagga mussels at \$250,000 annually are also included.

### **Economic Analysis – Flood Damage Reduction**

Only low levels of benefits relative to costs can be realized through this proposal, as demonstrated by the analysis and supporting documentation. Project 10 claims quantified flood damage reduction benefits of \$0.301 M. It is not clear that Expected Annual Damage (EAD) is calculated correctly in Table 9-5. According to the reviewer's calculation, EAD reduction is \$15,000.

## **Program Preferences**

The proposal addresses long term drought preparedness and demonstrates a significant degree of certainty that the Program Preferences claimed can be achieved. The proposal thoroughly documents the breadth and magnitude of the Program Preference to be implemented, however, the proposal does not include a specific project that meets a critical water supply or water quality need of a Disadvantaged Community. The following Program Preferences are included in the proposal: Drought preparedness, Use and reuse water more efficiently, Expand environmental stewardship, Protect surface water and groundwater quality, Practice integrated flood management, Climate change response actions, Include regional projects or programs, and Effectively resolve water related conflicts.